

10 / 666 , 354

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2002.10

U.S. Patent 6,465,372 to Xia et al., "Surface Treatment of C-Doped SiO₂, Film to Enhance Film Stability During O₂ Ashing," discusses methods for densifying low k dielectric layers including a plasma treatment with N₂ and He.

2002.06

U.S. Patent 6,403,464 to Chang, "Method to Reduce the Moisture Content in an Organic Low Dielectric Constant Material," provides a method for removing moisture from a low k dielectric layer and is a high density nitrogen plasma treatment at a temperature of from 350 to 450 degrees C.

2000.02

U.S. Patent 6,028,015 to Wang et al., "Process for Treating Damaged Surfaces of Low Dielectric Constant Organo Silicon Oxide Insulation Material to Inhibit Moisture Absorption," discloses a stabilization approach which treats a low k dielectric layer with H₂ plasma.

2002.08

U.S. Patent 6,436,808 to Ngo et al., "NH₃/N₂-Plasma Treatment to Prevent Organic ILD Degradation," employs a NH₃/H₂ plasma treatment of an ILD layer such as SiCOH that is repeated one or more times during a damascene process.

2000.08

U.S. Patent 6,103,601 to Lee et al., "Method and Apparatus for Improving Film Stability of Halogen-Doped Silicon Oxide Films," discusses a fluorine doped SiO₂ layer treated with hydrogen plasma.

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